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Five inducted as AFRL Fellows at Wright-Patt

by Fred Coleman, AFRL headquarters

WRIGHT-PATTERSON AFB, OHIO – The Air Force Research Laboratory recently chose five of its scientists and engineers as AFRL Fellows. The award, which confers a lifetime status, recognizes outstanding contributions in research and development and/or exceptional technical program management.

Selected from a field of 24 nominees for the annual award were:

- Dr. Charles Y-C Lee, Air Force Office of Scientific Research, Arlington, Va.
- Dr. Richard W. Linderman, Information Directorate, Rome (NY) Research Site
- Dr. Melvin C. Ohmer, Materials and Manufacturing Directorate, Wright-Patterson AFB
- Dr. LaVerne A. Schlie, Directed Energy Directorate, Kirtland AFB, N.M.
- Dr. Michael C. Wicks, Sensors Directorate, Rome Research Site

The five were honored during the AFRL Fellows induction ceremony and banquet Oct. 26, a day-long event at the Engineers Club of Dayton (ECD).

"As our top researchers, our Fellows lead and take part in special activities which enhance the laboratory's image," said Dr. Kenneth E. Harwell, AFRL chief scientist. "The lab commander encourages them to advise him on substantial issues. The lab relies on these leaders to represent it in significant endeavors in the national and scientific engineering communities."

Lee is an internationally recognized expert in polymer and organic materials research. His research in the electro optical polymer area made substantial progress in improving the properties of the materials. He recently initiated research into polymer matrix composites, which are key technologies for stealth and space structure applications.

Linderman is a distinguished leader in the fields of high performance computing architectures and signal/image processing. His single wafer scale signal processor recently demonstrated a record-breaking power efficiency, and his short stack memory designs were transitioned to several Department of Defense programs. This technology is now used commercially to significantly increase the memory density of the Cray J90 super computer.

Ohmer is internationally recognized for his expertise in the areas of electrical and magnetic/optical properties of materials, and the interaction of electromagnetic radiation with solids. He was pivotal to the development of component technologies that were used in a new tunable laser source. The tunable laser source is an integral part of future infrared countermeasures systems that will protect weapons systems from heat-seeking missiles.

Schlie made noteworthy contributions to laser technology development. His work across the entire spectrum of laser development influences national laser efforts. His photolytic iodine laser research is a key technology which makes high-energy, high-beam quality laser systems possible. These lasers are crucial to several DOD applications.

Wicks is the leading Air Force expert in a number of radar technologies. He has

invented ultra-wideband antennas, signal generation devices, receivers and clutter suppression techniques. His work has the potential to significantly enhance the survivability and performance of advanced radar sensors.

The award selection committee considers both military and civilian scientists and engineers, comprising about 55 percent of the AFRL workforce of 5700. To be eligible, participants must be assigned to AFRL for the past three consecutive years and have at least seven years of active federal service. The work recognized must have been performed at the laboratory or one of its predecessors, and meet one or more of the following criteria:

1) Fundamental or important discovery of sufficient magnitude to warrant recognition in the scientific or engineering community as a pioneering breakthrough.

2) Recognition as a national or international authority in one or more fields, including wide-spread recognition in the Air Force.

3) Sustained high-level achievements in programs of extraordinary importance to AFRL, the Air Force or national defense.

4) Continued significant personal contributions to the lab beyond normal expectations.

5) Exceptional record of scientific and technical achievements, creativity and leadership, patents, publishing in prefered publications, organizational skills, and development of lab programs.

This year's awards ceremony was part of a day-long celebration of the work done by this year's fellows, as well as the work of laboratory scientists and engineers awarded fellows status in previous years. The ECD hosted a Fellows Symposium the day of the awards ceremony, which was open to all Wright-Patterson employees and the public.

Major General Dick Paul, AFRL commander said, "I'm extremely proud of our five recipients; all are very deserving of this prestigious award – the highest honor we can bestow." **@**